

# Dr. Duke's Phytochemical and Ethnobotanical Databases

## Chemicals found in Mentha pulegium

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-CAMPHENE	Plant	106.0	212.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(+)-CAMPHENE	Essential Oil		10600.0		--
0	(+)-ISO-NEOMENTHOL	Essential Oil		6500.0		--
0	(+)-ISOISOPULEGONE	Essential Oil		2200.0		--
0	(+)-ISOISOPULEGONE	Plant	22.0	76.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(+)-ISOMENTHONE	Leaf Essent. Oil		207000.0		--
0	(+)-ISOMENTHONE	Essential Oil		52100.0		--
0	(+)-ISOMENTHONE	Plant	521.0	4140.0		--
0	(+)-ISOPULEGONE	Essential Oil				--
0	(+)-ISOPULEGONE	Plant				--
0	(+)-LIMONENE	Plant	10.0	290.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
1	(+)-MENTHOL	Essential Oil		162400.0		--
1	(+)-MENTHOL	Plant	1624.0	3248.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(+)-MENTHONE	Plant	680.0	1360.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(+)-MENTHONE	Essential Oil		68000.0		--
0	(+)-NEOISOMENTHOL	Plant	65.0	1150.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(+)-NEOMENTHOL	Plant	1.0	604.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(+)-NEOMENTHOL	Essential Oil		30200.0		--
0	(+)-OCTAN-3-OL	Plant	149.0	416.0		--
0	(+)-OCTAN-3-OL	Essential Oil		14900.0		--
4	(+)-PULEGONE	Plant	0.0	19400.0	-1.0	--
4	(+)-PULEGONE	Leaf Essent. Oil		501000.0		--
4	(+)-PULEGONE	Essential Oil	90000.0	970000.0	1.0	--
0	(-)-3-METHYL-CYCLOHEXANONE	Essential Oil				--
0	(-)-3-METHYL-CYCLOHEXEN-1-ONE	Essential Oil				--
0	(-)-ALPHA-PINENE	Essential Oil				--
0	(-)-ISOPULEGONE	Essential Oil		6500.0		--
0	(-)-ISOPULEGONE	Plant	65.0	154.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	(-)-LIMONENE	Essential Oil		4100.0		--
0	(-)-LIMONENE	Plant	41.0	148.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	(-)-MENTHOL	Plant	1.0	22.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	(-)-MENTHOL	Essential Oil		1100.0		--
2	(-)-MENTHONE	Leaf Essent. Oil		250000.0		--
2	(-)-MENTHONE	Essential Oil		308000.0		--
2	(-)-MENTHONE	Plant	50.0	6160.0	1.0	--
0	(-)-OCT-3-EN-1-OL	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	(-)-PINENE	Essential Oil				--
1	(-)-PIPERITONE	Essential Oil		4300.0		--
1	(-)-PIPERITONE	Plant	9.0	86.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	1,1,3-TRIMETHYL-CYCLOPENTAN-4-ONE	Essential Oil				--
0	1,1,3-TRIMETHYL-CYCLOPENTANONE	Plant				--
0	1,1,3-TRIMETHYL-CYCLOPENTANONE	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
67	1,8-CINEOLE	Plant		20.0	-0.5560490759487932	--
0	1-METHYL-CYCLOHEX-1-EN-3-ONE	Essential Oil				--
0	1-METHYL-CYCLOHEX-1-ONE	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	1-METHYL-CYCLOHEXAN-3-OL	Essential Oil				--
0	1-METHYL-CYCLOHEXAN-3-ONE	Essential Oil	80.0	80000.0		--
0	1-METHYL-CYCLOHEXANOL	Shoot				--
0	1-METHYL-CYCLOHEXANOL	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	3-METHYL-CYCLOHEXAN-1-OL	Essential Oil				--
0	3-METHYL-CYCLOHEXANONE	Plant	70.0	140.0		--
0	3-METHYL-CYCLOHEXANONE	Essential Oil				--
0	3-OCTYL-ACETATE	Plant	10.0	80.0	-0.6127218214163859	--
16	ACETIC-ACID	Essential Oil				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
2	ALPHA-HUMULENE	Plant	70.0	140.0	0.5902423704277919	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
11	ALPHA-PHELLANDRENE	Essential Oil		3000.0	-0.5349746839055997	--
11	ALPHA-PHELLANDRENE	Plant	30.0	60.0	-0.7513751346333919	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
28	ALPHA-PINENE	Leaf Essent. Oil		7000.0	-0.7146470778854853	--
28	ALPHA-PINENE	Essential Oil	2000.0	26000.0	-0.331283527078581	--
28	ALPHA-PINENE	Shoot Essent. Oil				--
28	ALPHA-PINENE	Plant	20.0	520.0	-0.11347774923265422	--
13	ALPHA-TERPINENE	Essential Oil		1000.0	-0.7495259974879932	--
13	ALPHA-TERPINENE	Plant		20.0	-0.471448810117065	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
23	ALPHA-TERPINEOL	Plant	70.0	140.0	-0.372099995911098	--
5	ALUMINUM	Plant		1850.0	2.9223806352535795	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
3	AROMADENDRENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	AROMADENDRENE	Essential Oil				--
0	ASH	Plant		73000.0	-0.867394454112097	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	BETA-BOURBONENE	Plant	15.0	30.0	-0.2993017571188262	Lawrence, B.M., Essential Oils 1976-1977, Essential Oils 1978, Essential Oils 1979-1980.
0	BETA-CARYOPHYLLENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	BETA-CARYOPHYLLENE	Essential Oil				--
0	BETA-FENCHENE	Essential Oil		300.0		--
0	BETA-FENCHENE	Plant	1.0	6.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	BETA-HUMULENE	Essential Oil				--
0	BETA-HUMULENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	BETA-METHYL-ADIPIC-ACID	Essential Oil				--
0	BETA-METHYL-DELTA-ISOBUTYLVALERIC-ACID	Plant				--
3	BETA-PHELLANDRENE	Essential Oil	800.0	20000.0	0.6280219486295257	--
3	BETA-PHELLANDRENE	Plant	3.0	400.0	2.9918668917708637	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
13	BETA-PINENE	Essential Oil	2000.0	14400.0	-0.41064310614185573	--
13	BETA-PINENE	Plant	20.0	288.0	-0.1245231451771769	--
13	BETA-PINENE	Shoot				--
6	BUTYRIC-ACID	Essential Oil				--
4	CADINENE	Plant	87.0	174.0	-0.722432676215474	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	CADINENE	Essential Oil		8700.0	-0.5068231682706219	--
28	CALCIUM	Plant	9440.0	16870.0	0.35091544969248395	--
9	CAMPHENE	Plant	1.0	70.0	-0.48608374240323066	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
9	CAMPHENE	Essential Oil	100.0	7000.0	-0.483566600830156	--
9	CAMPHENE	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
37	CARVACROL	Plant	100.0	400.0	-0.8114562574483182	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
37	CARVACROL	Essential Oil	10000.0	20000.0	-0.9288943509503852	--
19	CARVONE	Essential Oil				--
31	CARYOPHYLLENE	Plant	10.0	60.0	-0.49690029432931404	--
31	CARYOPHYLLENE	Essential Oil		1000.0	-0.7498359032671668	--
24	CHROMIUM	Plant		17.0	0.7215583160252136	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CINEOL	Essential Oil	2000.0	30000.0	-0.7470645738290619	--
0	CINEOLE	Plant	2.0	600.0	-0.5784936892904783	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CIS-ISOPULEGONE	Plant	20.0	120.0	1.0	--
0	CIS-PULEGONE-OXIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CIS-PULEGONE-OXIDE	Essential Oil				--
15	CITRONELLOL	Essential Oil		9000.0	-0.7045093281934509	--
15	CITRONELLOL	Plant	90.0	180.0	-0.30943366496458685	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
2	COBALT	Plant		14.0	-0.020060618763181548	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	CYMOL	Plant	160.0	320.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	CYMOL	Essential Oil		16000.0		--
19	D-LIMONENE	Essential Oil	1000.0	14500.0	-0.7092832756363163	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	DECYLIC-ACID	Essential Oil				--
0	DEHYDROMENTHOFURAN-OXIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	DEHYDROMENTHOFURAN-OXIDE	Essential Oil				--
0	DEHYDROXYMENTHOFURAN-OXIDE	Plant				--
0	DELTA-ISOBUTYRL-VALERIC-ACID-BETA-MENTHOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	DELTA-MENTHENONE	Essential Oil				--
34	DIOSMIN	Shoot				--
34	DIOSMIN	Leaf				--
7	DIPENTENE	Plant				--
0	DL-1,1,3-TRIMETHYLCYCLOPENTAN-4-ONE	Essential Oil				--
0	DL-LIMONENE	Essential Oil				--
0	DL-PIPERITONE	Essential Oil				--
0	EO	Tissue Culture				--
0	EO	Leaf		9200.0	-0.20538886846416335	--
0	EO	Shoot	3500.0	20000.0	0.8981574696493044	--
0	EO	Plant	10000.0	20000.0	0.7798359465806497	--
76	EUGENOL	Essential Oil		16000.0	-0.665687200498063	--
76	EUGENOL	Plant	160.0	320.0	-0.44442307760119315	--
0	FAT	Seed		266000.0	0.0032257759924247268	--
0	FAT	Plant		45000.0	-0.09847341356713703	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	FENCHENE	Plant	70.0	140.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	FENCHENE	Essential Oil		7000.0		--
6	FENCHONE	Plant	10.0	20.0	-0.5837172315870186	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	FENCHONE	Essential Oil		1000.0	-0.7042720360690181	--
15	FIBER	Plant		123000.0	-0.737905187992049	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
13	FORMIC-ACID	Essential Oil				--
11	GAMMA-TERPINENE	Plant		50.0	-0.5136265458798137	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
11	GAMMA-TERPINENE	Essential Oil		2500.0	-0.7879853217179721	--
2	GERMACRENE-D	Plant				--
6	GUAIAZULENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	GUAIAZULENE	Essential Oil				--
31	HESPERIDIN	Plant				--
0	HEXAN-1-OL	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
6	IRON	Plant		2310.0	1.9820351605052466	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	ISOHEPTYLIC-ACID	Essential Oil				--



Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
1	ISOMENTHOL	Plant	1.0	10.0	-1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
1	ISOMENTHOL	Essential Oil		500.0		--
1	ISOMENTHOL	Shoot				--
3	ISOMENTHONE	Plant	0.0	8420.0	1.8675461425083695	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
3	ISOMENTHONE	Essential Oil	12000.0	421000.0	1.0	--
0	ISONEOMENTHOL	Essential Oil				--
0	ISONEOMENTHOL-ACETATE	Essential Oil		3000.0		--
0	ISOPIPERITENONE	Essential Oil				--
0	ISOPIPERITENONE	Plant		80.0		--
0	ISOPIPERITONE	Plant				--
3	ISOPULEGOL	Plant	680.0	1360.0	1.414171474771408	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	ISOPULEGOLE	Essential Oil		68000.0		--
4	ISOPULEGONE	Plant	525.0	2014.0	1.4121740271883934	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
4	ISOPULEGONE	Essential Oil	52500.0	100700.0		--
0	KILOCALORIES	Plant		3490.0	0.1742430372477144	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
7	LAURIC-ACID	Essential Oil				--
60	LIMONENE	Essential Oil	1000.0	110000.0	-0.10391929710390785	--
60	LIMONENE	Plant	41.0	148.0	-0.39484502300696295	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
60	LIMONENE	Shoot				--
60	LIMONENE	Plant	10.0	2200.0	0.8662874679010774	--
60	LIMONENE	Leaf Essent. Oil		5000.0	-0.6561226246926355	--
0	LINALOL	Plant	15.0	30.0	-0.42543285788216045	--
0	LINALOL-ACETATE	Plant	10.0	820.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	LINALOL-ISOVALERATE	Plant	130.0	260.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
53	LINALOOL	Essential Oil				--
53	LINALOOL	Plant	15.0	30.0	-0.6602593620483829	--
0	LINALOOL-ACETATE	Plant	10.0	820.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	LINALOOL-ACETATE	Essential Oil	1000.0	41000.0	-0.23915742415427346	--
0	LINALOOL-ISOVALERATE	Plant	130.0	260.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	LINALOOL-ISOVALERATE	Essential Oil		13000.0		--
65	MAGNESIUM	Plant		5500.0	0.44507141297830793	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
14	MANGANESE	Plant		83.0	-0.10002848666961581	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	MENTHENE	Plant	280.0	560.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	MENTHENE	Essential Oil		28000.0		--
5	MENTHOFURAN	Shoot				--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
5	MENTHOFURAN	Essential Oil	200.0	8000.0	1.0	--
5	MENTHOFURAN	Plant	1.0	160.0	-0.7243223657474931	--
0	MENTHOFURAN-OXIDE	Essential Oil				--
0	MENTHOFURAN-OXIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
63	MENTHOL	Shoot				--
63	MENTHOL	Essential Oil	1000.0	478000.0	1.0	--
63	MENTHOL	Plant		3780.0	2.1738078001414967	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	MENTHOL-ACETATE	Shoot				--
0	MENTHOL-ACETATE	Essential Oil				--
0	MENTHOL-ACETATE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
30	MENTHONE	Essential Oil	1000.0	80000.0	1.0	--
30	MENTHONE	Plant	50.0	6160.0	0.49247976031206625	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
30	MENTHONE	Plant	10.0	6160.0	0.49247976031206625	--
30	MENTHONE	Shoot				--
22	MYRCENE	Essential Oil	2700.0	4500.0	-0.38506528864758083	--
22	MYRCENE	Plant	27.0	600.0	0.18309105499415446	--
6	MYRISTIC-ACID	Essential Oil				--
0	NEO-ISOPULEGOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	NEOISOMENTHOL	Plant	30.0	1160.0	1.0	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	NEOISOMENTHOL-ACETATE	Plant	30.0	286.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	NEOISOPULEGOLE	Essential Oil				--
2	NEOMENTHOL	Shoot				--
2	NEOMENTHOL	Essential Oil	28000.0	194000.0		--
2	NEOMENTHOL	Plant	1.0	3880.0	1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
5	NEPETALACTONE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
5	NEPETALACTONE	Essential Oil				--
10	NEROL	Plant	10.0	20.0	-0.4292275892118858	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
10	NEROL	Essential Oil		1000.0	-0.8213756657344466	--
6	O-CRESOL	Essential Oil				--
2	OCIMENE	Essential Oil		2500.0		--
2	OCIMENE	Plant	25.0	50.0	-0.7012050389583314	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	OCT-1-EN-3-OL	Essential Oil				--
0	OCT-3-EN-1-OL	Essential Oil				--
0	OCTAN-1-OL	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	OCTAN-1-OL-ACETATE	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	OCTAN-3-OL	Plant	20.0	440.0	1.0	--
0	OCTAN-3-OL	Shoot				--
0	OCTAN-3-OL	Essential Oil	2000.0	22000.0	1.0	--
0	OCTAN-3-OL-ACETATE	Plant	12.0	160.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	OCTAN-3-OL-ACETATE	Essential Oil	2900.0	8000.0		--
0	OCTAN-3-ONE	Essential Oil				--
0	OCTEN-1-OL	Essential Oil				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	OCTOIC-ACID	Essential Oil				--
0	OCTYLIC-ACID	Essential Oil				--
8	P-CRESOL	Essential Oil				--
16	P-CYMENE	Plant	3.0	610.0	-0.26146431649011576	--
16	P-CYMENE	Essential Oil	300.0	30500.0	-0.38158485622235	--
0	P-CYMOL	Shoot				--
0	P-CYMOL	Plant	30.0	60.0	-1.0049144952727418	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	P-CYMOL	Essential Oil		3000.0		--
0	P-MENTHA-1,4(8)-DIENE	Essential Oil				--
0	P-MENTHA-1,4(8)-DIENE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	P-MENTHANE	Essential Oil		4000.0		--
0	P-MENTHANE	Plant	40.0	80.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
13	PALMITIC-ACID	Essential Oil				--
4	PELLANDRENE	Shoot				--
26	PHENOL	Essential Oil				--
4	PHOSPHORUS	Plant		2520.0	-0.5135291849072152	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	PIPERITENOL	Plant	100.0	200.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PIPERITENOL	Essential Oil		9900.0		--
3	PIPERITENONE	Essential Oil		240000.0		--
3	PIPERITENONE	Plant	30.0	4800.0	1.6731162867837588	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PIPERITOL	Essential Oil		1000.0		--
0	PIPERITOL	Plant	10.0	20.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PIPERITOL-ACETATE	Essential Oil		10000.0		--
0	PIPERITOL-ACETATE	Plant	100.0	200.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
7	PIPERITONE	Plant	10.0	11000.0	2.219380329493596	--
7	PIPERITONE	Essential Oil	3000.0	700000.0		--
0	PIPERTENONE	Essential Oil		3300.0		--
0	PIPERTENONE	Plant	33.0	66.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
14	POTASSIUM	Plant	10500.0	15310.0	-0.45241372175813044	--
0	PROTEIN	Seed	100000.0	246000.0	0.10856029952162446	--

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	PROTEIN	Plant	100000.0	112000.0	-0.5037049042481623	--
0	PULEGOL	Plant	400.0	800.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PULEGOLE	Essential Oil		40000.0		--
28	PULEGONE	Shoot				--
28	PULEGONE	Essential Oil	300000.0	930000.0	1.3308095011183545	--
28	PULEGONE	Plant	520.0	18800.0	1.4373197944141436	--
0	PULEGONE-EPOXIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	PULEGONE-EPOXIDE	Essential Oil				--
57	ROSMARINIC-ACID	Plant		30000.0	0.09914512201035752	Fitoterapia No.62: 166.
57	ROSMARINIC-ACID	Inflorescence		30000.0	-0.26815560301571756	--
5	SABINENE	Essential Oil	1500.0	7000.0	-0.5464939750962685	--
5	SABINENE	Plant	8.0	140.0	-0.3524551800814526	--
5	SALICYLALDEHYDE	Essential Oil				--
34	SALICYLIC-ACID	Essential Oil				--
0	SALICYLIC-ACID-METHYL-ESTER	Essential Oil				--
60	SELENIUM	Plant		25.0	0.6881720243035053	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
4	SILICON	Plant		182.0	0.5511913566398267	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
1	SODIUM	Plant	2790.0	5410.0	-0.004600503542934433	--
35	TANNIN	Plant		40000.0	-0.6370616203493836	--
0	TERPINENOL	Plant	10.0	20.0		Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.

Activities Count	Chemical	Plant Part	Low PPM	High PPM	StdDev	Reference Citation
0	TERPINENOL	Essential Oil		1000.0		--
9	TERPINOLENE	Plant	1.0	90.0	0.05649215319734414	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
9	TERPINOLENE	Essential Oil	100.0	4500.0	-0.36188656386428764	--
17	THUJONE	Essential Oil		1000.0	-1.0	--
17	THUJONE	Plant	10.0	20.0	-0.5825251858703618	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
71	THYMOL	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
71	THYMOL	Essential Oil				--
4	TIN	Plant		24.0	0.21332933498995302	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
0	TRANS-BETA-OCIMENE	Essential Oil		400.0	-1.0	--
0	TRANS-BETA-OCIMENE	Plant	1.0	8.0	-1.0	Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	TRANS-ISOPULEGONE	Plant	70.0	320.0		--
0	TRANS-PULEGONE-OXIDE	Plant				Duke, J. A. Writeups or information summaries on approximately 2,000 economic plants, USDA, ARS, Beltsville, MD 20705.
0	TRANS-PULEGONE-OXIDE	Essential Oil				--
0	WATER	Plant		912000.0	0.6039243158292479	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.
77	ZINC	Plant		56.0	0.03803390463662481	Pedersen, M. 1987. Nutritional Herbology. Pederson Publishing. Bountiful, Utah. 377 pp.